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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TREMBLAY, MARK STEPHEN	
ART UNIT	PAPER NUMBER
2827	

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/737,306	CHUNG, KEVIN KWONG-TAI	
	Examiner	Art Unit	
	Mark Tremblay	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-102* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-102* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC §102 and 35 U.S.C. §103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 13-19, 22, 24-37, 39-41, 43-49, 51-55, 57-59, 74-75, 77-79, 82-83, and 85-102 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent #6,081,793 to Challener et al. , or alternatively under 35 U.S.C. § 103 as being unpatentable over U.S. Patent #6,081,793 to Challener et al. ("Challener" hereinafter) in view of Performance and Test Standards For Punchcard, Marksense, and Direct Recording Electronic Voting Systems by the Federal Election Commission ("Fed" hereinafter). Challener teaches a voting apparatus comprising:

a processor 225 (a processor is inherent in the term "server") for processing voting information (see abstract) and providing a voting session identifier (see Fig. 7, item #389);

a display (see figure 1C) coupled for receiving voting information from said processor;

a voter interface (the "voter's PC) for receiving voting selections made by a voter and coupling same to said processor, said processor providing a voting record including the voting selections (See figure 7, continued);

a memory (inherent in either of the terms PC or server) coupled to said processor for storing the voting record and the voting session identifier (all of the voter's PC, the Authentication

Server, the Journal server, and the Results Server appear to qualify); and

means coupled to said processor for storing the voting record and the voting session identifier in a tangible medium separate from said memory (e.g. a second server with a memory or storage device, such as the Journal server).

While the Examiner finds that a Journal server inherently contains a tangible medium for storage, if the term "tangible" is construed more narrowly to mean one of a portable non-volatile electronic memory such as a smart card or a portable printed memory such as a printed receipt, it is not clear that Challener would qualify. First, Examiner takes the position that PCS and servers are known to operate with printers, which can generally print anything that can be displayed by the PC or server. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a printer to print out the ballot, in order to have a "hard copy" of the voting record in case of computer failure, an obvious procedure and motivation understood by any person skilled in the art.

Second, Examiner alternatively takes the position that Fed teaches the use of a tangible medium to provide a voter confirmation of the vote. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a printout of the voter ballot and information taught by Challener as suggested by Fed because such a printout would provide a voter confirmation of the recorded vote, in case there was some mistake in the voter's selections.

Re claims 15-16, the authentication server, like the other servers, provides the ballot ID in encrypted form. The encryption described in Challener involves the production of random or pseudo random numbers to protect the voter's identity; the skilled artisan is directed to see Schneier, referenced in Challener in the first paragraph of column 4, for details.

Re claims 17, 25 the ballot ID would not be called a ballot ID if it were to identify the voter, and there would be no reason to provide the voter ID if it did.

Claims 1-61 and 65-102 are rejected under 35 U.S.C. § 103 as being unpatentable over Challener, either alone or as modified by Fed, in view of U.S. Patent #6,412,692 to Miyagawa ("Miyagawa" hereinafter). Challener either alone or as modified by Fed teaches the features of

the invention as described above, but does not teach that the record of the vote may be stored on the smart card. Miyagawa teaches that the record of the vote may be stored on the smart card. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to store the information on the smart card as described by Miyagawa because this would provide a portable voter confirmation analogous to the portable printed confirmation taught by Fed.

Re claim 11, Fed teaches that it may be required to keep the confirmations at the voting station, to avoid possible illegal activities. In any case, once the vote has been confirmed, the voter does not necessarily need to keep and possess the confirmation, and the State has interests in the confirmation.

Re claim 12, see figure 14 of Miyagawa.

Re claims 10, 22-23, the combination of a printed confirmation and confirmation stored in the smart card is suggested by the references as a whole.

Re claim 73, nothing in Challener requires an Internet connection. The server/client configuration works fine in a LAN configuration. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to implement the combined teachings on a LAN, at a polling place, with the various servers on site at the polling place, because this would reduce reliance on the Internet, which is known to have security risks and connectivity problems during high loads.

Claims 62-64 are rejected under 35 U.S.C. § 103 as being unpatentable over Challener, either alone or as modified by Fed, in view of Miyagawa, and further in view of 1998 Advanced Card Technology Sourcebook ("Sourcebook" hereinafter). Challener, either alone or as modified by Fed, in view of Miyagawa teach the features of the invention, but are silent on the sizes of the storage on smart cards. Sourcebook teaches that 32K cards were feasible in 1997, and predicted to increase to 64K by 1999. Sourcebook also teaches that large EEPROMs are desirable, since applications can be loaded and deleted in a secure fashion onto them. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a smart card having at least 32K, at least because such a smart card is more versatile and adaptable to

multiple applications, as understood in the art, making the voter card more versatile, and useful for other applications. There are as many reasons to want larger storage size on a smart card, as there is for wanting more storage on a PC.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent Application #2001/0035445 to Davis et al, U. S. Patent #6,250,548 to McClure et al. and U. S. Patent #4,373,134 are cited for showing other electronic voting systems.

Voice

Inquiries for the Examiner should be directed to Mark Tremblay at (703) 305-5176. The Examiner's regular office hours are 10:30 am to 7:00 pm EST Monday to Friday. Voice mail is available. If Applicant has trouble contacting the Examiner, the Supervisory Patent Examiner, Michael Lee, can be reached on (703) 305-3503. Technical questions and comments concerning PTO procedures may be directed to the Patent Assistance Center hotline at 1-800-786-9199 or (703) 308-4357.

MARK TREMBLAY
PRIMARY EXAMINER

June 27, 2003